

COLUMN-AND-BEAM JOIN STRUCTURE

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ABSTRACT OF THE DISCLOSURE

10 The present invention provides a column-and-beam
join structure which absorbs energy caused by a large
earthquake or the like by split tees surely yielding at a
prescribed value, does not cause other members to
fracture, and thus makes it possible to replace only the
split tees which have become unusable, and, more
specifically, a column-and-beam join structure
15 constructed by attaching and connecting, using bolts 9,
the ends 8a of both the upper and lower flanges 8 of a
steel beam (H-shaped steel beam) 7 between the webs 6 of
a pair of upper and lower split tees 4 the flanges 5 of
which are connected to a steel column 1 using bolts 3.
20 The upper limit of the yield stress of the steel material
used for the split tees 4 is defined to be not more than
twice the lower limit thereof. Further, in order for the
web 6 extending from the flange 5 of a split tee 4 in the
axial direction of an H-shaped steel beam 7 to absorb
25 earthquake energy by its plasticization, the cross-
sectional area of the web 6 is reduced partially and the
base end portion 6a of the web 6 is divided from the tip
portion 6b which is connected to the flange 8 of the H-
shaped steel beam 7.